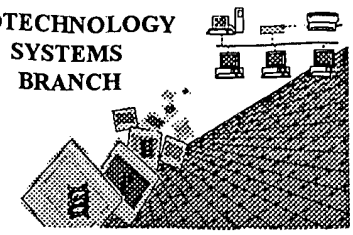
ep

BIOTECHNOLOGY SYSTEMS BRANCH



# RAW SEQUENCE LISTING ERROR REPORT

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:**

Application Serial Number: 10/662,651
Source: OIPE
Date Processed by STIC: 9/25/2003

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**
**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

**http://www.uspto.gov/web/offices/pac/checker**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**>, **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service, or other delivery service to:** U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003

## Raw Sequence Listing Error Summary

| ERROR DETECTED | SUGGESTED CORRECTION | SERIAL NUMBER: 10/662,651 |
|---|---|---|

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

| | | |
|---|---|---|
| 1____ | Wrapped Nucleics<br>Wrapped Aminos | The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping." |
| 2____ | Invalid Line Length | The rules require that a line **not exceed** 72 characters in length. This includes white spaces. |
| 3____ | Misaligned Amino Numbering | The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead. |
| 4____ | Non-ASCII | The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please *ensure your subsequent submission is saved in ASCII text.*** |
| 5____ | Variable Length | Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing. |
| 6____ | PatentIn 2.0 "bug" | A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.** |
| 7____ | Skipped Sequences (OLD RULES) | Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence:<br>(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)<br>(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)<br>(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)<br>This sequence is intentionally skipped<br><br>Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences. |
| 8____ | Skipped Sequences (NEW RULES) | Sequence(s) _____ missing. **If intentional**, please insert the following lines for **each** skipped sequence.<br><210> sequence id number<br><400> sequence id number<br>000 |
| 9____ | Use of n's or Xaa's (NEW RULES) | Use of n's and/or Xaa's have been detected in the Sequence Listing.<br>Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.<br>In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents. |
| 10____ | Invalid <213> Response | Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence |
| 11____ | Use of <220> | Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.<br>Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.<br>(See "Federal Register," 07/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules) |
| 12____ | PatentIn 2.0 "bug" | Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk. |
| 13_✓_ | Misuse of n/Xaa | "n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid nothing else |

OIPE

**RAW SEQUENCE LISTING** DATE: 09/25/2003
PATENT APPLICATION: **US/10/662,651** TIME: 16:18:16

Input Set : **A:\Seq listing.txt**
Output Set: **N:\CRF4\09252003\J662651.raw**

```
      3 <110> APPLICANT: De Strooper, Bart
      4       Annaert, Wim
      6 <120> TITLE OF INVENTION: Binding Domains Between Presenilins and Their Substrates as
      7       Targets for Drug Screening
      9 <130> FILE REFERENCE: 2676-6086US
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/662,651
C--> 11 <141> CURRENT FILING DATE: 2003-09-15
     11 <150> PRIOR APPLICATION NUMBER: PCT/EP/02/043033
     12 <151> PRIOR FILING DATE: 2002-03-15
     14 <150> PRIOR APPLICATION NUMBER: EP01201015.3
     15 <151> PRIOR FILING DATE: 2001-03-16
     17 <160> NUMBER OF SEQ ID NOS: 22
     19 <170> SOFTWARE: PatentIn version 3.2
     21 <210> SEQ ID NO: 1
     22 <211> LENGTH: 21
     23 <212> TYPE: PRT
     24 <213> ORGANISM: Artificial
     26 <220> FEATURE:
     27 <223> OTHER INFORMATION: Human transmembrane region 1 of presenilin 1
     29 <400> SEQUENCE: 1
     31 Val Ile Met Leu Phe Val Pro Val Thr Leu Cys Met Val Val Val Val
     32 1               5                   10                  15
     35 Ala Thr Ile Lys Ser
     36             20
     39 <210> SEQ ID NO: 2
     40 <211> LENGTH: 21
     41 <212> TYPE: PRT
     42 <213> ORGANISM: Artificial
     44 <220> FEATURE:
     45 <223> OTHER INFORMATION: Human transmembrane region 1 of presenilin 2
     47 <400> SEQUENCE: 2
     49 Val Ile Met Leu Phe Val Pro Val Thr Leu Cys Met Ile Val Val Val
     50 1               5                   10                  15
     53 Ala Thr Ile Lys Ser
     54             20
     57 <210> SEQ ID NO: 3
     58 <211> LENGTH: 8
     59 <212> TYPE: PRT
     60 <213> ORGANISM: Artificial
     62 <220> FEATURE:
     63 <223> OTHER INFORMATION: carboxy-terminal of human presenilin 1
     65 <400> SEQUENCE: 3
     67 Leu Ala Phe His Gln Phe Tyr Ile
```

Does Not Comply
Corrected Diskette Needed

pp 3-4

**RAW SEQUENCE LISTING** DATE: 09/25/2003
PATENT APPLICATION: **US/10/662,651** TIME: 16:18:16

Input Set : **A:\Seq listing.txt**
Output Set: **N:\CRF4\09252003\J662651.raw**

```
68 1               5
71 <210> SEQ ID NO: 4
72 <211> LENGTH: 8
73 <212> TYPE: PRT
74 <213> ORGANISM: Artificial
76 <220> FEATURE:
77 <223> OTHER INFORMATION: carboxy-terminal of human presenilin 2
79 <400> SEQUENCE: 4
81 Leu Ala Ser His Gln Leu Tyr Ile
82 1               5
85 <210> SEQ ID NO: 5
86 <211> LENGTH: 11
87 <212> TYPE: PRT
88 <213> ORGANISM: Artificial
90 <220> FEATURE:
91 <223> OTHER INFORMATION: Part of the transmembrane region of human APP
93 <400> SEQUENCE: 5
95 Thr Val Ile Val Ile Thr Leu Val Met Leu Lys
96 1               5                  10
99 <210> SEQ ID NO: 6
100 <211> LENGTH: 5
101 <212> TYPE: PRT
102 <213> ORGANISM: Artificial
104 <220> FEATURE:
105 <223> OTHER INFORMATION: Part of the transmembrane region of telencephalin
107 <400> SEQUENCE: 6
109 Val Ala Gly Pro Trp
110 1               5
113 <210> SEQ ID NO: 7
114 <211> LENGTH: 34
115 <212> TYPE: PRT
116 <213> ORGANISM: Artificial
118 <220> FEATURE:
119 <223> OTHER INFORMATION: synthesized peptide
122 <220> FEATURE:
123 <221> NAME/KEY: SITE
124 <222> LOCATION: (19)..(34)
125 <223> OTHER INFORMATION: conserved transmembrane region
127 <400> SEQUENCE: 7
129 Val Val Ile Ala Thr Val Ile Val Ile Thr Leu Val Met Leu Lys Lys
130 1               5                  10                  15
133 Lys Gln Cys Arg Gln Leu Arg Ile Ala Gly Arg Arg Leu Arg Gly Arg
134             20                  25                  30
137 Ser Arg
141 <210> SEQ ID NO: 8
142 <211> LENGTH: 18
143 <212> TYPE: PRT
144 <213> ORGANISM: Artificial
146 <220> FEATURE:
```

**RAW SEQUENCE LISTING** DATE: 09/25/2003
PATENT APPLICATION: **US/10/662,651** TIME: 16:18:16

Input Set : **A:\Seq listing.txt**
Output Set: **N:\CRF4\09252003\J662651.raw**

147 <223> OTHER INFORMATION: synthesized peptide
149 <400> SEQUENCE: 8
151 Val Val Ile Ala Thr Val Ile Val Ile Thr Leu Val Met Leu Lys Lys
152 1 5 10 15
155 Lys Gln
159 <210> SEQ ID NO: 9
160 <211> LENGTH: 17
161 <212> TYPE: PRT
162 <213> ORGANISM: Artificial
164 <220> FEATURE:
165 <223> OTHER INFORMATION: synthesized peptide
168 <220> FEATURE:
169 <221> NAME/KEY: misc_feature
170 <222> LOCATION: (1)..(1)
171 <223> OTHER INFORMATION: X is a palmityol group
173 <400> SEQUENCE: 9
W--> 175 **Xaa Leu Val Gln Pro Phe Met Asp Gln Leu Ala Phe His Gln Phe Tyr**
176 1 5 10 15
179 Ile
183 <210> SEQ ID NO: 10
184 <211> LENGTH: 32
185 <212> TYPE: PRT
186 <213> ORGANISM: Artificial
188 <220> FEATURE:
189 <223> OTHER INFORMATION: synthesized peptide
192 <220> FEATURE:
193 <221> NAME/KEY: SITE
194 <222> LOCATION: (1)..(16)
195 <223> OTHER INFORMATION: conserved transmembrane region
197 <400> SEQUENCE: 10
199 Gly Arg Gln Leu Arg Ile Ala Gly Arg Arg Leu Arg Gly Arg Ser Arg
200 1 5 10 15
203 Leu Val Gln Pro Phe Met Asp Gln Leu Ala Phe His Gln Phe Tyr Ile
204 20 25 30
207 <210> SEQ ID NO: 11
208 <211> LENGTH: 16
209 <212> TYPE: PRT
210 <213> ORGANISM: Artificial
212 <220> FEATURE:
213 <223> OTHER INFORMATION: synthesized peptide
215 <400> SEQUENCE: 11
217 Leu Val Gln Pro Phe Met Asp Gln Leu Ala Phe His Gln Phe Tyr Ile
218 1 5 10 15
221 <210> SEQ ID NO: 12
222 <211> LENGTH: 31
223 <212> TYPE: PRT
224 <213> ORGANISM: Artificial
226 <220> FEATURE:
227 <223> OTHER INFORMATION: synthesized peptide

see item 13 on Error Summary Sheet

**RAW SEQUENCE LISTING** DATE: 09/25/2003
PATENT APPLICATION: **US/10/662,651** TIME: 16:18:16

Input Set : **A:\Seq listing.txt**
Output Set: **N:\CRF4\09252003\J662651.raw**

```
230 <220> FEATURE:
231 <221> NAME/KEY: SITE
232 <222> LOCATION: (16)..(31)
233 <223> OTHER INFORMATION: conserved transmembrane region
235 <400> SEQUENCE: 12
237 Ala Thr Val Ile Val Ile Thr Leu Val Met Leu Lys Lys Lys Gln Gly
238 1               5                   10                  15
241 Arg Gly Leu Arg Ile Ala Gly Arg Arg Leu Arg Gly Arg Ser Arg
242             20                  25                  30
245 <210> SEQ ID NO: 13
246 <211> LENGTH: 15
247 <212> TYPE: PRT
248 <213> ORGANISM: Artificial
250 <220> FEATURE:
251 <223> OTHER INFORMATION: synthesized peptide
253 <400> SEQUENCE: 13
255 Ala Thr Val Ile Val Ile Thr Leu Val Met Leu Lys Lys Lys Gln
256 1               5                   10                  15
259 <210> SEQ ID NO: 14
260 <211> LENGTH: 9
261 <212> TYPE: PRT
262 <213> ORGANISM: Artificial
264 <220> FEATURE:
265 <223> OTHER INFORMATION: synthesized peptide
268 <220> FEATURE:
269 <221> NAME/KEY: misc_feature
270 <222> LOCATION: (1)..(1)
271 <223> OTHER INFORMATION: X is a palmityol group
273 <400> SEQUENCE: 14
W--> 275 Xaa Leu Ala Phe His Gln Phe Tyr Ile
276 1               5
279 <210> SEQ ID NO: 15
280 <211> LENGTH: 13
281 <212> TYPE: PRT
282 <213> ORGANISM: Artificial
284 <220> FEATURE:
285 <223> OTHER INFORMATION: synthesized peptide
288 <220> FEATURE:
289 <221> NAME/KEY: misc_feature
290 <222> LOCATION: (1)..(1)
291 <223> OTHER INFORMATION: X is a palmityol group
293 <400> SEQUENCE: 15
W--> 295 Xaa Phe Met Asp Gln Leu Ala Phe His Gln Phe Tyr Ile
296 1               5                   10
299 <210> SEQ ID NO: 16
300 <211> LENGTH: 24
301 <212> TYPE: PRT
302 <213> ORGANISM: Artificial
304 <220> FEATURE:
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**RAW SEQUENCE LISTING** DATE: 09/25/2003
PATENT APPLICATION: **US/10/662,651** TIME: 16:18:16

Input Set : **A:\Seq listing.txt**
Output Set: **N:\CRF4\09252003\J662651.raw**

```
305 <223> OTHER INFORMATION: synthesized peptide
308 <220> FEATURE:
309 <221> NAME/KEY: SITE
310 <222> LOCATION: (1)..(16)
311 <223> OTHER INFORMATION: conserved transmembrane region
313 <400> SEQUENCE: 16
315 Gly Arg Gln Leu Arg Ile Ala Gly Arg Arg Leu Arg Gly Arg Ser Arg
316 1               5                   10                  15
319 Leu Ala Phe His Gln Phe Tyr Ile
320             20
323 <210> SEQ ID NO: 17
324 <211> LENGTH: 28
325 <212> TYPE: PRT
326 <213> ORGANISM: Artificial
328 <220> FEATURE:
329 <223> OTHER INFORMATION: synthesized peptide
332 <220> FEATURE:
333 <221> NAME/KEY: SITE
334 <222> LOCATION: (1)..(16)
335 <223> OTHER INFORMATION: conserved transmembrane region
337 <400> SEQUENCE: 17
339 Gly Arg Gln Leu Arg Ile Ala Gly Arg Arg Leu Arg Gly Arg Ser Arg
340 1               5                   10                  15
343 Phe Met Asp Gln Leu Ala Phe His Gln Phe Tyr Ile
344             20                  25
347 <210> SEQ ID NO: 18
348 <211> LENGTH: 8
349 <212> TYPE: PRT
350 <213> ORGANISM: Artificial
352 <220> FEATURE:
353 <223> OTHER INFORMATION: synthesized peptide
355 <400> SEQUENCE: 18
357 Leu Ala Phe His Gln Phe Tyr Ile
358 1               5
361 <210> SEQ ID NO: 19
362 <211> LENGTH: 12
363 <212> TYPE: PRT
364 <213> ORGANISM: Artificial
366 <220> FEATURE:
367 <223> OTHER INFORMATION: synthesized peptide
369 <400> SEQUENCE: 19
371 Phe Met Asp Gln Leu Ala Phe His Gln Phe Tyr Ile
372 1               5                   10
375 <210> SEQ ID NO: 20
376 <211> LENGTH: 16
377 <212> TYPE: PRT
378 <213> ORGANISM: Artificial
380 <220> FEATURE:
381 <223> OTHER INFORMATION: synthesized peptide
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**RAW SEQUENCE LISTING ERROR SUMMARY** DATE: 09/25/2003
PATENT APPLICATION: **US/10/662,651** TIME: 16:18:17

Input Set : **A:\Seq listing.txt**
Output Set: **N:\CRF4\09252003\J662651.raw**

**Please Note:**
**Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.**

Seq#:9; Xaa Pos. 1
Seq#:14; Xaa Pos. 1
Seq#:15; Xaa Pos. 1

**Invalid <213> Response:**
**Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.**

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22

**VERIFICATION SUMMARY** DATE: 09/25/2003
PATENT APPLICATION: **US/10/662,651** TIME: 16:18:17

Input Set : **A:\Seq listing.txt**
Output Set: **N:\CRF4\09252003\J662651.raw**

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0